CA Common Services for z/OS

Release Notes

Release 14.1.00

Second Edition

CA Technologies Product References

This document references the following CA Technologies products:

- CA JARS® DSA Resource Management Option
- CA MICS® Resource Management (CA MICS)
- CA NetSpy™ Network Performance
- CA Network and Systems Management (CA NSM)
- CA NSM NetMaster® Option
- CA OPS/MVS® Event Management and Automation (CA OPS/'MVS EMA)
- CA Service Desk
- CA Easytrieve® Report Generator (CA Easytrieve Report Generator)

Documentation Changes

The following documentation updates have been made since the last release of this documentation:

- CA LSERV ADDPOOL Command (see page 11)—Added this section.
- Post Release 14.1 Enhancements (see page 13)—Added this section.
- Version 14.0 Enhancements (see page 15)—Added this section.
- Version 12.0 Enhancements (see page 25)—Added this section.

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- CA Support policies and guidelines
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Contents

Chapter 1: Enhancements to Existing Features

This section contains the following topics:

USERMOD Replaced with CAIRIM Control Statements

In previous releases, after CA Common Services for z/OS was installed, clients that are using CAISSF for RACF products were required to install a user modification (USERMOD). This modification involves updating class tables imbedded within CAS9RACL and CAS9SAFC.

In this release, that user modification is replaced with control statements in the CAIRIM initialization routine. After installation, customers identify any RACF class table values in their existing user modification and code the necessary parameters using CAIRIM control statements. For instructions, see the *Installation Guide.* This is a one time change, unless a new CA product is installed that requires a class table entry.

Changes to the Customization Required for RACF Sites

With this release of CA Common Services, there has been a change in the way customization is performed for sites using RACF.

Skip this section if you do not use RACF or if you have not modified or customized the RACF security tables in either CAS9SAFC or CAS9RACL.

CA Common Services previously distributed CAS9SAFC and CAS9RACL as both load modules and sample source code. You could modify the security tables within these two modules to meet certain needs. These modules are no longer being distributed and the security tables have been removed from them. Now CAIRIM dynamically creates the security table. CAIRIM has new parameters that can be used to customize the dynamic table. For further instructions on customizing the table, see the CAISSF for RACF customization in the *Installation Guide*. Also, see how CAS9INIT initializes CAISSF when security product is not yet active in the *Administration Guide.*

Create a member in a parameter library of your choice. The member name can be anything that fits your company standards. The default for the library is CAI.CAW0OPTN and the default for the member name is RACFLIST. The CAS9 procedure contains the following DD statement:

```
//*CAIRACF DD  DISP=SHR,DSN=&CAW0OPTN(RACFLIST)
```

Uncomment the statement and update the DSN and member name to match your requirements.

The dynamic table contains the following entries:

CA Solution Class Name	Translated Class Name	FASTAUTH	Used by CICS
ACAPPL	AC@PPL		
ACCBPROC	AC@BPROC		
ACDIALOG	AC@DLG		
ACLIST	AC@LST		
ACMSG	AC@SG		
ACPANEL	AC@ANEL		
ACREPORT	AC@EPORT		
ACSQL	AC@QL		
CAADMIN	CA@DMIN	YES	
CACCFDSN	CA@SNCCF		
CACCFMEM	CA@EMCCF		
CACMD	CA@MD	YES	YES
CADDS	CA$DS	YES	
CADOC	CA@OC		
CALENDAR	CA@ENDAR	YES	
CALIBMEM	CA@IBMEM		

CA Solution Class Name	Translated Class Name	FASTAUTH	Used by CICS
CAREPORT	CA@EPORT	YES	
CATAPE	CA@APE	YES	
CAVAPPL	CA@APPL		
DATETAB	DA@ETAB		
DCTABLE	DC@ABLE	YES	
DFTABLE	DF@ABLE	YES	
DOCVIEW	DOCVIEW	YES	
DRTABLE	DR@ABLE	YES	
DSTABLE	DS@ABLE	YES	
DTADMIN	DT@DMIN	YES	
DTSYSTEM	DT@YSTEM	YES	
DTTABLE	DT@ABLE	YES	
DTUTIL	DT@TIL	YES	
DUC	TD$CTRN	YES	
DXTABLE	DX@ABLE	YES	
JOBNAME	JO@NAME		
MICCMD	MI@CMD	YES	
OPCMD	OP@MD	YES	
PANEL	PA@EL	YES	
RECIPID	RE@IPID	YES	
SCHEDULE	SC@EDULE		
STATION	ST@TION		
SUBMIT	SU@MIT		
UNVEDIT	UN@EDIT		
UNVRPRT	UN@RPRT		
UNVPGM	UN@PGM		
VMANAPPL	VM@NAPPL		
VTRMNODE	VT@MNODE		

Update the table with control statements as needed based on the customizations you have done in the past.

Example

To change the CACMD entry to no longer support the fast RACF Check and to use CAADMIN under CICS, use the following control statements to create a member:

```
RACFCLASS   CACMD,CA@MD,FASTAUTH=NO
RACFCLASS   CAADMIN,CA@DMIN,FASTAUTH=YES,CICS=YES
```

Consolidated the CAISDI/els and CAISDI/med Interfaces and Added Functionality

A new application has been added to provide enhancements to existing CAISDI/els (Event Library Support) and CAISDI/med (MVS Event Director) interfaces. The functions of CAISDI/els and CAISDI/med are now combined into this one application (CAISDI/elmds) which runs in a permanent address space.

The CAISDI/elmds adds the following functionality for CA products that use CAISDI/els and CAISDI/med:

- CA products can now potentially “update” and “close” a ticket.
- CA products can potentially provide more detail in identifying the component that created a ticket.
- CAISDI/elmds can be initialized when either the CAISDI/soap Server or Service Desk is not available.
- Tracing and messaging are consolidated to a single SYSOUT which can be spun to aid in diagnostics.
- New messages replace the CAISDI/els and CAISDI/med messages which were presented as WTO messages. A message file is delivered where individual messages can be designated to also be written as WTO messages. Existing WTO messages can be changed to not be displayed through WTO.
- There is reduced CSA (Common Storage Area) usage for the CAISDI/els support.

Data Set Changes

It is now mandatory to add the CAW0PLD data set to the system linklist. In the previous CA Common Services for z/OS release, the CAW0PLD data set could optionally be added to the system linklist.

Note: CA Common Services for z/OS r14.1 includes only the BASE and OPTIONAL components. LEGACY and MFNSM components remain at the CCS v14.0 level. From a data set perspective, this organization means that if you are running CCS v14.0, continue to use the CCS v14.0 low-level qualifier CCCS* and CNSM* data sets. Replace only the running low-level qualifier CAW0* data sets with CCS r14.1 level CAW0* data sets.

CA Easytrieve Report Generator Packaged With CA Common Services

Starting with CA Common Services for z/OS (CCS) release 14.1, CA Easytrieve Report Generator is packaged with CCS as a separate product with a separate installation process. This repackaging eliminates the need for multiple CA Easytrieve Report Generator installations and the complexities of managing and maintaining those installations.

If you have an active CA Easytrieve Report Generator r11.6 license, you do not need to install the copy that is packaged with CCS. All product functionality is available. If you do not have an active license and you are running a CA product that requires CA Easytrieve Report Generator, install the copy that is packaged with CCS. Product functionality is restricted to running CA Easytrieve Report Generator reporting jobs that are distributed with other CA products.

If the JCL that you use to run CA Easytrieve Common Service jobs contains a DD statement for a macro library, which is usually with the DDNname of PANDD, the DSN of that macro library must correspond to the DSN of the executable library that is used for that job. The macro library and the executable library must be from the same installation of CA Easytrieve Report Generator.

CA Datacom/AD

CA Common Services for z/OS r14.1 is designed and tested to work with Datacom/AD r14. CA Common Services for z/OS r14.1 also works with CA Datacom/AD r12. For more information, see the *Readme.*

The deployment procedure documented in the *Installation Guide* is completely revised for CA Datacom/AD r14.

If you plan to use this procedure, review the information carefully for changes since the last release of CA Common Services for z/OS.

CA LSERV ADDPOOL Command

The CA LSERV ADDPOOL command has been enhanced to allow a maximum of 65,535 buffers per buffer size. The previous maximum was 512.

Chapter 2: Post Release 14.1 Enhancements

This section details a list of enhancements available and the PTF number:

Important! Applying these PTFs is optional. Additionally, to use the features released in each PTF, simply apply the maintenance according to your regular site procedures.

This section contains the following topics:

CA MASTER Updates

PTF RO52582 and RO52583 - CAMASTER Updates

CAMASTER now lets you control the automatic startup of *CAMASTER infrastructure* address spaces. This behavior is similar to that of the existing CA Health Checker address space. PTF RO47457 lets you selectively avoid starting the CA Health Checker address space when you do not want to run it. This update builds on the previous enhancement by adding:

- The ability to override the default parmlib member name (which is CAIMST20) using a keyword inside of parmlib member CAIMST00.
- The ability to control how often in a given interval CAMASTER automatically restarts an address space that ends unexpectedly.
- The ability to issue CAMASTER commands to start an address space. For example, you can start CAHCHECK using:

  ```
  "F CAMASTER,START COMPONENT=CAHCHECK"
  ```

  instead of

  ```
  "S
  IEESYSAS,PROG=CAHCHECK,JOBNAME=CAHCHECK,TIME=1440,SUB=MSTR,REUSASID=YES"
  ```

Note: For more details, see the *Reference Guide*.

Common Address Space Shell

PTF RO52583 - Common Address Space Shell

This enhancement introduces the Common Address Space Shell (CASRV). This service is part of the CAMASTER FMID. The purpose of the CASRV is to provide an environment where CA components or CA products can be hosted in a secure environment with the proper z/OS integrity while providing you consistent operational behavior. The CASRV is designed such that you can start multiple address spaces using the CASRV component using unique JCL PROCs or parameter files.

Note: For more details, see the *Administration Guide* and *Reference Guide*.

PTF RO52583 - Common Message Service Updates for CASRV

The Common Messaging Service, which was available in CCS r14.1, is enhanced to support the same message table being used by more than one address space.

CAIRIM Updates

PTF RO52581 - CAIRIM Updates for SYSPLEX Parameter Sharing

CAIRIM is enhanced to support IF/ENDIF logic statements, LOG/NOLOG keywords, and system symbols in RIMPARMs to improve SYSPLEX parameter sharing capability.

No special requirements exist when migrating to this new feature. Simply, update your RIMPARM statements to take advantage of the newly supported syntax capabilities. All RIMPARM statements remain the same.

Note: For more details, see the *Administration Guide*.

ENF Updates

PTF RO52193 - Improved ENF Toleration of Accidental MUF Shutdown

Prior to this PTF, if the Datacom XMUF or IMUF mistakenly shut down while ENF was up, ENF produced many S0C4 abends. This enhancement lets ENF stay up and reconnect to a Datacom XMUF if it is restarted.

Note: For more details, see the DBCR option in the *Reference Guide*.

Appendix A: Version 14.0 Enhancements

When you are upgrading, this section can help you identify the updates that you receive in addition to the r14.1 enhancements noted in this guide.

This section contains the following topics:

New Features

DVD Delivery

This product can be installed from directories on your CA Technologies mainframe product DVD.

Note: For more information, see the *Installation Guide* on the DVD.

CA OPS/MVS System State Manager

CA ENF can automatically communicate both active status events and heart beat events to CA OPS/MVS EMA. The enabling technology for this is through a generic active status or heartbeat event API call that CA OPS/MVS EMA provides to other CA mainframe products so that they can communicate events consistently to CA OPS/MVS EMA.

CA Common Services for z/OS Delivered as Four Pax Files

CA Common Services for z/OS is now delivered as four pax files rather than one monolithic file.

The number of common services comprising CA Common Services for z/OS has been steadily growing over time, and managing the bundle of common services as one deliverable has grown to be unwieldy and difficult, both from a CA perspective and from a customer perspective. Some common services are needed at all customer sites, some common services are optional and require some scrutiny as to whether they require installation or not. Some common services have a fairly regular maintenance stream and some legacy common services have very little maintenance. Some common services are ported to z/OS from other platforms and their release schedule is tied to the product release schedule of a distributed platform product.

To manage different common services independently, the following four pax file common service bundles have been created for Version 14.0:

Base (Required) Common Services

CAIRIM, CAIENF, CAICCI, CAECIS, CA Health Checker, CA Master, CA MSM

Optional Common Services

CAIENF/CICS, CAIENF/CICS Spawn, CAIENF/DB2, CAIENF/USS, CAISDI, CA Easytrieve, CA-GSS, CA-GREXX, CA-XPS, Apache Tomcat

Legacy Common Services

CA-C Runtime, Viewpoint, CA Earl, SRAM Service,CA-L-Serv

Mainframe CA NSM Common Services

Event Management, Agent Technology

Legacy and Mainframe CA NSM Common Services will be installed into their own Low Level Qualifier target libraries since these two bundles will receive upgrade activity at a slower pace than the Required or Optional Common Services. Optionally you may also assign a different High Level Qualifier to the Legacy and Mainframe CA NSM Common Services. This will allow for upgrading the Required Common Services and the Optional Common Services but leave the Legacy Common Services and Mainframe CA NSM Common Services at their existing software level.

The next release of CA Common Services for z/OS beyond Version 14.0 will not include the Legacy and MFNSM pax files. Customers will simply continue to use their installed Version 14.0 Legacy and MFNSM installed and deployed data sets. You may notice that the CA Common Services for z/OS Version14.0 non-MSM installation has separate jobs for handling the Legacy and MFNSM data set allocations and DDDEFs for this reason.

Optional Common Services have data set allocations and DDDEFs that are included with the BASE AW0 prefixed jobs for the following reasons:

- The Optional Common Services will have the same release schedule as the base for at least another release of CA Common Services for z/OS.
- The Optional Common Services target libraries overlap almost completely with the Base Common Services target set of libraries.

Apache Tomcat Delivered with CA Common Services for z/OS

A number of CA products either require or optionally need Apache Tomcat to be their Web Application Server. Many products have been separately delivering Tomcat with their product installations. Tomcat makes it possible to share the binary executables and still run separate instances of Tomcat as needed. With CA Common Services for z/OS Version 14.0, you can now install Tomcat as part of the Optional Common Services.

Over time CA products that use Tomcat, will stop delivering Tomcat and instead these products will supply a procedure for creating an instance of Tomcat for product usage where the binaries are executed from the deployed Common Services Tomcat directories. This will allow for Tomcat maintenance to be applied using one CA Common Services PTF rather than several individual product Tomcat PTFs, all utilizing different FMIDs.

For the near future, the intent is not to run multiple products within one Tomcat instance. In the long term however, once the switch to a CA Common Services based Tomcat has been achieved, it is CA Technologies' intention to determine what CA products can feasibly run in the same Tomcat instance.

zIIP Enablement Service

CA Common Services for z/OS Version 14.0 includes a new subcomponent of the CAIRIM common service named the zIIP Enablement Service. The zIIP Enablement Service can be exploited by some CA products, given the right circumstances, to run some of their code on zIIP processors.

Enhancements to Existing Features

LMP Key

Dynamic LMP key removal from a system is now provided. Some modern data centers may not IPL some systems for long periods of time and with this feature an LMP key can be removed on a system without an IPL. This feature can be useful if it is decided that a particular system will no longer be running a particular CA product. With the LMP key removed, if the product was unknowingly still being used then LMP key warning messages would begin. This could help a site learn that either the product was still required on a particular system or that there are users who have not been informed that product usage needs to be discontinued.

CAIENF Event Maximum Record Length Increased

CAIENF Version 14.0 increases the maximum event record length from 255 to 10,000. Previously, while there was some provision within ENF for events that had lengths greater than 255, such events could not be recorded to the ENF database. With ENF Version 14.0, CA products can define events, with ENF DCM modules, that are up to 10,000 bytes in length and be able to request that such events have recording enabled.

CAIENF EMCS Console Command Response

CAIENF Version 14.0 builds on the EMCS console command response support that began to be implemented in CAIENF r12.0. Many additional ENF commands now support the full response of a command being directed to the EMCS console that the command was issued on. For example, if the ENF STATUS command is issued under SDSF, the response will be returned to the user without having to scroll to the bottom of the SYSLOG display looking for the response.

CAIENF SCREEN and SELECT Parameter Logical AND Capability

Prior to ENF Version 14.0, only logical OR could be achieved with ENF SCREEN and SELECT parameters. CAIENF Version 14.0 provides a new syntax on ENF SCREEN and SELECT parameters that permits a logical AND as well as a logical OR of specified SCREEN conditions and SELECT conditions. For details, see the CA Common Services for z/OS Reference Guide, CAIENF Control Options chapter.

CAIENF/SNMP SNMPv3 Support

CAIENF/SNMP Version 14.0 provides support for sending SNMP traps using the SNMPv3 protocol. This change allows sending SNMPv2 Trap PDUs using the SNMPv2c or SNMPv3 protocol. When using the SNMPv3 protocol, the following combinations are supported:

- No authentication, no privacy
- Authentication, no privacy
- Authentication, privacy

Note: These are the only allowed combinations defined by the SNMPv3 protocol.

CAIENF/DB2 DB2 v10.1 Support

CAIENF/DB2 Version 14.0 incorporates the DB2 v10.1 support that was available through maintenance for older CA Common Services releases.

CA Health Checker Common Service r12.1 Incorporated

CA Health Checker Service r12.1 and CAMASTER are now included within the Base Common Services at the Version 14.0 level.

CAIENF/USS Performance Improvements

Performance improvements are made in CAIENF/USS Version 14.0 that greatly improve internal control block handling for USS applications that do a considerable amount of DUBing and UNDUBing. These improvements will reduce CPU consumption for such applications.

In addition, ENF/USS' dataspace under Version 14.0 is now associated with the CAMASTER address space rather than the z/OS MASTER address space. This helps to better isolate operating system and non-operating system resources.

Important! Having the CAMASTER address space up and running is now a requirement for running ENF/USS. The CAMASTER address space is automatically started when the CA Common Services Version 14.0 CAW0LPA data set is added to the system LPA list through 'SYS1.PARMLIB(LPALSTxx)' and the CAW0LINK data set is added to the system linklist through 'SYS1.PARMLIB(LNKLSTxx)' or 'SYS1.PARMLIB(PROGxx)'.

CAICCI Spawned Task Soft Shutdowns

CAICCI Version 14.0 now soft stops spawned started task address spaces such as CCISSL, CCISSLGW, and CCILGR rather than canceling them, which causes an S222 abend. Some sites may have automation software that gets tripped for any abend condition in an important address space and it is possible that special provisions have to be made for S222 abends. Eliminating the S222 abend will avoid having to make any special automation arrangements. In general associated joblogs and syslog entries will be cleaner too.

CAISDI/Soap Support for CA Service Desk r11 WSDL

CAISDI/Soap Version 14.0, the CA z/OS product Service Desk Interface Web Service Client interface, has been enhanced to support the higher level CA Service Desk WSDL, the r11 level WSDL. Prior to CAISDI/Soap Version 14.0, the CA Service Desk r6 level WSDL had to be used for mainframe product interfacing. CA Service Desk has thus been shipping two levels of the WSDL. CA Service Desk has the ability to run the r11 level WSDL and the r6 level WSDL at the same time by assigning a different URL to each. This enhancement will allow the CA Service Desk product team to remove the older r6 level WSDL from their product delivery.

CAISDI/Soap Version 14 now uses the IBM XML parser for flexibility so that changes in XML standards will not necessarily require changes to the CAISDI/Soap product.

CAISDI/Soap Version 14.0 has also been enhanced so that it will handle all the XML processing within the CAISDI/Soap address space. CAISDI/els and CAISDI/med have been updated so that they no longer need to perform XML processing themselves. This gives CAISDI/els and CAISDI/med support for the CA Service Desk r11 level WSDL too.

CAISDI/Soap Version 14.0 delivers a new started task proc in the CAW0PROC dataset named CASOAPE. CASOAPE is used for communicating with a CA Service Desk that runs the r11 level WSDL. The original proc named CASOAP is also still delivered for communicating with a CA Service Desk platform that runs the r6 level WSDL. As a result you may be able to discontinue running the r6 level WSDL on your CA Service Desk platform and only run the r11 level WSDL depending on your CA product mix. There may be a need to run both CASOAP and CASOAPE at the same time.

CAISDI/Soap Base Support for Closing and Updating CA Service Desk Tickets

CAISDI/Soap Version 14.0 delivers support for exploiting the CA Service Desk Web Service methods of Closing or Updating currently open CA Service Desk tickets. This new support is at the CA Soap base level, which allows some CA products that use the base CAISDI SOAP API to enhance their products to provide, close, and update CA Service Desk ticket support. CA network management products fall into this category.

CAISDI/els and CAISDI/med will be enhanced in a future release of CA Common Services and at that time CA products that exploit the CAISDI/els or CAISDI/med APIs will then also be in a position to take advantage of this enhancement to CAISDI/Soap.

CAISDI/Soap Version 14.0 delivers a new startup procedure in the CAW0PROC dataset named CASOAPE. When enhanced CA networking management products are installed that support open and updating CA Service Desk tickets, the following applies:

- The CASOAPE address space must be started
- CASOAPE must be configured to communicate with a CA Service Desk platform that is running the r11 WSDL

Conversely, if the CA network management products are not running their enhanced levels yet, then the CASOAP proc must continue to be used communicating with a CA Service Desk running the r6 level WSDL. If CAISDI/els or CAISDI/med products are in use on the same system then CASOAPE should also be started.

The following CA Products use the CAISDI/Soap base API and therefore require the running of the CASOAP proc until such time that these products deliver enhancements that will allow them to run with the CASOAPE proc and possibly take advantage of closing and updating Service Desk tickets.

- CA NSM NetMaster Option
- CA Netspy Network Performance
- CA JARS DSA Resource Management Option
- CA MICS

Changes to Data Set Names

The names of most data sets have changed. You should review the following table to determine the impact this may have to your installation:

Original Name	New Name	Description
CAILOAD	CAW0LOAD CAW0LINK CCCSLOAD CCCSLINK CNSMLOAD	CiiiLOAD are executable load libraries that can either be in the linklist or STEPLIBed to. CiiiLINK are executable load libraries that must be in the linklist.
CAISRC	CAW0SRC CCCSSRC	Source Code
CAIPROC	CAW0PROC CCCPROC	Sample Procs
CAIOPTN	CAW0OPTN CCCOPTN	Sample Parameters
CAIMAC	CAW0MAC CCCMAC	Sample Macros
CAIDCM	CAW0DCM	ENF DCMs
CAIPLD	CAW0PLD	Executables Load Library that must be in a PDSE. Library can be link listed
CAIJCL	CAW0JCL CCCSJCL CNSMJCL	Sample Batch Job JCL
CAIOPTV	CAW0OPTV	Sample parameter files or USS environment variable files that require variable record length
CAISCRN	CAW0SCRN	3270 panels
CAILPA	CAW0LPA	Executables Load Library that must be the LPA list
CAISAMP	CAW0SAMP	Sample Source Code

Common Services that are included in the Base Common Services bundle or the Optional Common Services bundle will be installed into target data sets that have a low-level qualifier of the form CAW0xxxx.

Common Services that are included with the Legacy Common Services bundle will be installed into target data sets that have a low-level qualifier of the form CCCSxxxx.

Common Services that are included with the Mainframe CA NSM Common Services bundle will be installed into target data sets that have a low-level qualifier of the form CNSMxxxx.

Note: For CA Common Services for z/OS Version 14.0, the traditional load library, in the past named CAILIB or CAILOAD, has been split into datasets whose low-level qualifiers indicate whether the load library is required to be in the system linklist or whether it can optionally be added to the system linklist. Data sets with a low-level qualifier of the form CiiiLINK must be placed in the system linklist. Data sets with a low-level qualifier of the form CiiiLOAD can optionally be placed in the system linklist. CiiiLOAD data sets, if not placed in the system linklist, must be STEPLIBed to in JCL that requires load modules from the CiiiLOAD data sets. Due to the nature of CA Common Services, we recommend that CiiiLOAD data sets also be placed in the system linklist so that the need for STEPLIBs is eliminated.

Changes to CAICCI Protocols

Prior to CAICCI Version 14.0 multiple TCP/IP protocols were available, SSL capable and older non-SSL capable. Because the CCI SSL capable TCP/IP protocols also support running in non-SSL mode, for CAICCI Version 14.0, only the SSL capable code is being delivered. The SSL capable protocol code has shown itself to be robust, production capable, and well performing, and that has made it possible to run only the SSL capable protocols, TCPSSL and TCPSSLGW. It should also be noted that the TCPSSL and TCPSSLGW protocols support TCPIPv6, whereas the older TCPIP and TCPIPGW protocols do not.

So that CCIPARMs that specify protocols TCPIP or TCPIPGW do not immediately need an update to specify TCPSSL or TCPSSLGW, the CCITCP proc will be delivered in the CAW0PROC data set pre-customized with JCL that executes the SSL capable program but setup to run in non-SSL mode. Similarly, the CCITCPGW proc JCL will be delivered in the CAW0PROC data set pre-customized to run the SSL capable code in a non-SSL mode. Thus if the Version 14.0 CCITCP or CCITCPGW procs are customized and deployed to your system proclib, then the CCIPARMs do not require an update.

Changes to CCIPC

CCIPC is the Microsoft Windows CAICCI software for CA products that require a client/server connection with the mainframe utilizing the TCPSSL protocol, formally the TCPIP protocol (see above). CCIPC is now available with 64-bit addressing and 32-bit addressing. The CCIPC 32-bit addressing self-extracting executable is named CCIPCS32 and the 64-bit addressing self-extracting executable is named CCIPCS64. Both are now Install-Shield based and they can be installed onto the same PC if that PC is running a 64-bit version of Windows. The new 64-bit CCIPCS64 installation allows CA Windows-based products that are written to run in 64-bit addressing mode to communicate with the mainframe.

With CCIPC Version 14.0, end-user SSL certificates are now supported in PKCS#12 format and both user and CA certificates can be stored and accessed from the Windows Certificate Store.

Changes to Supported Versions of CICS

CAIENF/CICS Version 14.0 supports CICS Transaction Service v3.1 and above and discontinues support for CICS Transaction Server v1.3, v2.2, and v2.3 that existed in CAIENF/CICS r12.0.

Component Trace Improvements

Component Trace support has been added for CAICCI.

The new CAICCI auto command CCICT has been added as well, to provide for the customization of the component trace environment including the component name.

For more information, see the CAICCI Component Trace chapter in the *Reference Guide*.

Unlimited CPU Support

The latest IBM zSeries hardware and z/OS v1.12, currently have a CPU limit of 80 per LPAR. This limit recently went up from 64 on the old zSeries hardware.

CA Common Services for z/OS r12.0, with properly applied maintenance for r12.0 ENF and CAICCI components, supports up to 128 CPUs per LPAR.

With CA Common Services for z/OS Version 14.0, the number of CPUs supported is unlimited. This enhancement puts CA Common Services for z/OS Version 14.0 in a better position for growth moving into the future. The enhancement also frees up a small amount of real storage that was needed to handle each 16 CPU increment.

Appendix B: Version 12.0 Enhancements

When you are upgrading, this section can help you identify the updates that you receive in addition to the r14.1 enhancements noted in this guide.

This section contains the following topics:

New Features

Support User-Defined Job Failure Messages in ENF

The CA Common Services r12 installation facility now allows user-defined message prefixes to be added to the ENF table that identifies job failure messages.

New Trace Facility

A trace facility in the Base CAENF product has been added with the following characteristics:

- The tracing facility uses the standard IBM Component Trace facility.
- ENFCT is an optional ENF parameter file statement used to define Component name, the number of buffers, the size of a buffer, and the Component Trace parmlib member name (to set default tracing).
- Traced ENF events can be assigned a trace event ID.
- Event ID Groups (EIDG) are provided as a way to group sets of trace event IDs. EIDGs allow a single identifier to be used, rather than having to list each event ID individually.
- Trace sets that define a set of EIDGs to be traced are provided and are referenced with a trace Set ID.
- The Component Trace Start/Stop Routine (SS-Routine) provides the interface for activating, deactivating, defining, deleting, enabling, disabling, modifying, pausing, resuming, and listing status or information about trace sets as well as connecting and disconnecting the Writer.
- Provides a default Component Trace parmlib member defining L1 and C1 as the default Event ID Groups to be traced.
- Tracing can be paused and resumed to internally allow or disallow tracing.

TRACE CT,ON processing can manipulate trace sets while internal tracing is not active. The Writer can remain connected while internally the tracing is paused.

- When tracing is deactivated, activated, paused, or resumed, the status of the trace sets is not altered unless other parameters apply.
- Filtering at capture time is based on Event ID Groups, ASID, and JOBNAME.

CAIRIM Enhancements

- PDSE load library support for dynamically loaded routines

  The Common Services Resource Initialization Manager (CAIRIM) dynamically adds modules to the Link Pack Area. This enhancement allows these routines to be loaded from a PDSE data set.

- Improvement to the way CAIRIM locates dynamically loaded routines

  The CAIRIM method of locating dynamically loaded routines has been modified to reduce CPU consumption.

- New CAIRIMU utility program parameters

  The CAIRIMU TSO utility includes supplemental reporting of LMP statistics and installed product usage and key data. New optional parameters have been introduced to allow selective reporting and the PROD optional parameter can be used to display detailed product licensing information.

- Routing console message to SYSPRINT

  Console messages generated by CAIRIM can be routed to an external data set. This enhancement is activated by including a //SYSPRINT DD statement in the CAIRIM startup JCL. The data set defined by SYSPRINT can be either a standard sequential data set or a JES2 SYSOUT data set.

ENF Enhancements

- PDSE load library support to the ENF LPA manager

  The Event Notification Facility (ENF) component of Common Services requires support routines to be dynamically added to the z/OS link pack area (LPA). This enhancement allows these routines to be loaded from a PDSE data set.

- Improvement to the way ENF locates dynamically loaded routines

  The ENF method of locating dynamically loaded routines has been modified to reduce CPU consumption.

Agent Technology r11.2 with IPv6

Agent Technology r11.2 with IPv6 support has been added to CA Common Services for z/OS r12 which ensures that the z/OS platform remains compatible with CA NSM when new releases of CA NSM are deployed.

CA Health Checker Common Service

CA Health Checker common service provides a simple and consistent method for CA products to create health checks to run under the IBM Health Checker for z/OS. The IBM Health Checker for z/OS helps you identify potential problems in your z/OS environment by checking system or product parameters and system status against recommended settings. CA z/OS product health checks are automatically activated on the target system when the product is started on a system where the following components are installed and configured:

- CA Health Checker common service
- IBM Health Checker for z/OS

Serviceability

Serviceability is a new common service that has been added to CA Common Services as a subcomponent of CAIRIM. Serviceability includes the following services for CA products:

- Ensure that messages associated with an error or failure provide clear information for use in problem determination.
- Capture necessary documentation (DUMPS, SYSLOG, LOGREC, TRACE DATA).
- Identify ownership of resources (Eyecatchers).
- Simplify identification of preventive and corrective maintenance.

CA products will be enhanced over time to make use of these services. The enhancements will be developed to use the new Serviceability functions only if they are available.

Enhancements to Existing Features

General Updates

The following updates have been made regarding specific terms, versions, features, and products:

- Older releases of CA products using CA Common Services might still refer to the CA Common Services load libraries as CAI.CAILIB and CAI.CAIPDSE. In an effort to standardize CA product libraries across the company, CAI.CAILIB and CAI.CAIPDSE have been replaced by CAI.CAILOAD and CAI.CAIPLD.
- The ENFplex function has been removed in preparation for enhanced functionality in a future release.
- The ENF/Extract feature has been removed. With the change to CA Datacom/AD as the recording database for events, CA Datacom/AD standard utilities will replace this functionality.
- ENF now ABENDs if the operating system is before z/OS 1.4. This update was made due to limited ENF functionality when running on versions prior to z/OS 1.4.
- ENFQ, CAS9DB, VPE, MFLINK, CA PROFILE, and CAICCI 1.1 have been removed. Only CAICCI r12.0 is available.
- General ENF enhancements have been made to improve performance and reliability.
- Support has been added for routing LMP input processing messages to a SYSPRINT DD instead of to the console/syslog.
- Console processing has been changed to use 4-byte console IDs instead of 1-byte Console IDs.
- S910INIT has been changed to CAS9INIT. For CAISSF installation, be sure to update the INIT statement with CAS9INIT instead of S910INIT. For specific instructions, see the *Installation Guide*.

Improved CAISDI/SOAP Interface

The following improvements have been made to the Simple Object Access Protocol (CAISDI/SOAP) interface:

- Configuration parameters and commands have been added or updated. For details, see the *CA Service Desk Integration Guide*.
- The SOAP Client allows use of symbolic URLs and for each such URL, allows a separate user ID and password. These symbolic values have been defined in the configuration file.

ENF DCMs Are Now Processed at ENF Startup

With ENF r12, DCMs are no longer stored in the database itself. Rather, DCMs are now read and processed at ENF startup time.

To enable CAIENF DCM modules for handling events, the DCM modules must be specified with a DCM statement in the ENF configuration member ENFPARM. For DCM statement specification details, see *CAIENF Control Options in the Reference Guide*.

Because ENF now processes DCMs at ENF start up, the CA Datacom/AD database becomes optional. The CA Datacom/AD database is only required if event recording is turned on. A new ENF parameter, NODB, is available for starting ENF without the optional CA Datacom/AD database.

ENF Modified to Use CA Datacom/AD

CA Datacom/AD now ships with CA Common Services and ENF event recording now uses CA Datacom/AD in place of CA-Universe database technology.

The ENFDB DD statement is no longer needed in the ENF JCL.

ENF has been modified to accommodate CA Datacom/AD with the following:

- CAS9DB functions have been replaced.
- Some control statements have been removed.
- BACKUP is being renamed.
- CA Datacom/AD can run in the ENF address space.

CAS9DB Functions Replaced

The ENF CAS9DB utility is no longer in existence for ENF r12. All functions of CAS9DB have been replaced with alternate methodologies. The following table shows each CAS9DB control statement and the corresponding methodology in ENF r12.

CAS9DB DBIN Statement	ENF r12 Equivalent
ADDU DB(ENFDB) USERID(xxxxxxx)	No r12 equivalent. User IDs not required.

ALTER DB(ENFDB) EVENT(xxxxxxxx) OPT(A,R,P) RETPD(nn)	ENF Parm control statements: EVENT(xxxxxxxx,ACT) EVENT(xxxxxxxx,REC) EVENT(xxxxxxxx,RP=n) EVENT(xxxxxxxx,PURGE=Y)

INST DB(ENFDB) DCM(xxxxxxxx)	ENF Parm control statement:
	DCM(xxxxxxxx)
	and in ENF Proc:
	//CAIDCM DD DSN=hlq.CAIDCM,…
	// DD DSN=hlq.product.llq

INST DB(ENFDB) DCM(xxxxxxxx) REPLACE	Use CAS9DCMR utility SYSPUNCH output data set DROP TABLE statements as input to CAIJCL member CASQL004. Run CAIJCL member CADB001 and CASQL004 with ENF down.
LIST DB(*) DETAIL	Use the new CAS9DCMR utility for DCM event information. Use the CASQL003 sample job in the CAIJCL data set to obtain recorded event record counts.
QUERY DB(*) SELECT ……	CA Datacom/AD DBSQLPR utility. See CASQL001, 002, 003 CAIJCL data set sample members.

The ENFUTIL utility has been provided to create the new DCM and EVENT control option statements required to upgrade from CA Common Services r11. This utility uses a CA Common Services r11 DB detail listing as input. For Special DCM and EVENT Utility details, see the Reference Guide.

ENF Control Statements Removed

The following ENF control statements have been removed because they pertain to the CA Universe database technology or because they are for obsolete functionality:

- BUFFERS
- CFPOLICY
- COLD
- EXTRACT
- EXTROFF
- MAXUSERS
- STRNAME
- XSYSLOGR
- WORKDS

If one of these control statements exists in the ENFPARMS member, a warning message is issued that the statement will be ignored and that it should be removed.

BACKUP and ARCHIVE

The ENF control option BACKUP is renamed to ARCHIVE. Currently, BACKUP performs both a backup and a purge (remove) operation. ARCHIVE is the industry standard name for this functionality.

If you use the BACKUP control option, the following warning message is issued to instruct you to use the ARCHIVE option instead:

```
CA recommends you use ARCHIVE rather than BACKUP...
The BACKUP command will be accepted for
now, but it may be retired or redefined
in future ENF releases.
BACKUP - Command complete
```

In this release, the ARCHIVE and BACKUP options perform the same function. In a future release, the BACKUP option might be changed to perform a backup only.

CA Datacom/AD in ENF Address Space

If you plan to have ENF record events, a CA Datacom/AD MUF (Multi-User Facility) is required. ENF r12 provides the option of running the CA Datacom/AD MUF in the ENF address space or running it in an external address space.

The CAIPROC data set delivers the following sample ENF r12 procs that are already partially customized to meet the possible environments:

- ENF - If no database is required (NORECORD, NODB in ENF Parms)
- ENFIMUF - CA Datacom/AD will run in the ENF address space as a subtask.
- ENFXMUF - CA Datacom/AD will run in a separate address space.

Event Management Modified to Use CA Datacom/AD

Event Management Calendar and Message Action usages require the CA Datacom/AD database.

The Datacom/TR database is no longer used.

A new environment variable CA_OPR_ZOSDB (defaults to no) has been introduced which specifies whether the CA Datacom/AD database will be used.

ENF/CICS r12 No Longer Supports Some Releases

ENF/CICS r12 no longer supports these older CICS releases:

- V1R7
- V2R1
- V3R1
- V3R2
- V3R3
- V4R1

ENF/CICS r12 does not support these releases of CICS Transaction Server:

- V1R1
- V1R2
- V2R1

CICS Transaction Server release V1R3, is supported.

All newer releases of CICS Transaction Server are supported.

CA Common Services FMIDs No Longer Shipped with r12.0

The following CA Common Services are not part of CA Common Services for z/OS r12.0:

- CAIVPE
- CA Profile
- CA MFLink

CAIVPE (FMID CWU4200 at CCS r11) now ships with CA Datacom/DB and CA Datacom/AD and is part of their product installation.

CA Profile (FMID CPP1000 at CCS r11) is replaced by the CA Examine Common Inventory Service (CAECIS), which was available beginning with CA Common Services r11. From a utility program name standpoint, the CAISERVX utility replaces the CAISERV utility.

CA MFLink is no longer shipped because there are no longer any CA products that require it.

Note: CA Service Desk Interface was shipped in CA Common Services r11, as three separate FMIDs (CSD1000, CSD1001, and CSD1002). In CA Common Services for z/OS r12.0 the three FMIDs have been combined into one SMP FMID (CDYFC00).